

# DISCUSSION PAPER ON THE WATER TRANSFER ELEMENT CALFED WATER USE EFFICIENCY COMPONENT

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## A. Introduction

The CALFED Bay Delta Program is developing a long term solution to problems affecting the Bay-Delta system, including problems associated with ecosystem quality, water quality and water supply reliability. CALFED recognizes that water transfers are an important part of the water management landscape and can be valuable in the effort to improve water supply reliability, water use efficiency, water quality and the aquatic ecosystem. Transfers can provide an effective means of moving water between users on a voluntary and compensated basis, as well as a means of providing incentives for water users to implement water management practices which will improve water use efficiency. Transfers can also provide water for environmental purposes in addition to the minimum instream flow requirements.

The CALFED Water Transfer Element will emphasize and encourage the development of a policy framework for the evaluation and regulation of water transfers, both short and long term. The goals of this policy framework are those that have been established for the Program:

- to reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system;
- to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species; and
- to provide good water quality for all beneficial uses.

A prominent feature of each draft CALFED alternative is modification of Delta water conveyance, ranging from modest changes in operations to major physical changes in Delta configuration. These changes in the Delta would, to varying extent, address the need for adequate flexibility and capacity in Delta conveyance facilities so that transfers can be accomplished without impairment of the delivery of Central Valley Project and State Water Project water supplies.

In addition to these physical or operational changes in the Delta, the Water Transfer Element may propose that the agencies which have regulatory authority over transfers, or which control the facilities to which others must have access for transfers, coordinate their rules and criteria for approval of transfers, in order to achieve more uniformity and consistency. The

Water Transfer Element will also address other policy or institutional changes which will facilitate transfers, encourage the development of an orderly water transfer market, and provide assurances of reasonable protection from adverse environmental and third party impacts.

CALFED recognizes that water transfers can have adverse as well as beneficial impacts. CALFED actions to reduce conveyance constraints or to facilitate cross-Delta transfers could potentially exacerbate adverse impacts associated with water transfers. In order to minimize or mitigate the adverse impacts of water transfers, the CALFED Water Transfer Element will be guided by the five criteria articulated by the Governor in his 1992 water policy statement.

## **B. State and Federal Water Transfer Policies**

Both State and federal law contain provisions that authorize, acknowledge, or support water transfers. In the past five years, important policy on water transfers has been established or reaffirmed at both the State and federal levels.

In his water policy speech in April of 1992, Governor Wilson reiterated the State's support for use of water transfers and the water transfer market, and described five criteria which transfers must meet:

First: Water transfers must be voluntary. And they must result in transfers that are real, not just paper. Above all, water rights of sellers must not be impaired.

Second: Water transfers must not harm fish and wildlife resources and their habitats.

Third: We need to assure that transfers will not cause overdraft or degradation of groundwater basins.

Fourth: Entities receiving transferred water should be required to show that they are making efficient use of existing water supplies, including carrying out urban Best Management Plans or Agricultural Water Efficiency Practices.

Fifth and finally: Water districts and agencies that hold water rights or contracts to transferred water must have a strong role in determining what is done. The impact on the fiscal integrity of the districts and on the economy of small agricultural communities in the San Joaquin Valley can't be ignored . . . any more than can the needs of high value-added, high tech industries in the Silicon Valley.

In addition to the Governor's policy, both California law and federal law include provisions that authorize and acknowledge transfers as reasonable and beneficial uses of water. California Water Code section 109 says in part: "It is hereby declared to be the established policy of this state to facilitate the voluntary transfers of water and water rights ...".

The 1992 Central Valley Project Improvement Act also addressed transfers. Section 3405(a) of the CVPIA authorizes all individuals or districts who receive Central Valley Project (CVP) water under water service, repayment, water rights settlement or exchange contracts to transfer all or a portion of the CVP water they receive to any other California water user.

However, even with this policy framework and a significant body of statutory law on transfers, there are a number of issues and questions which continue to arise and CALFED has been encouraged to address these issues and questions in the long term Bay Delta Program.

### **C. BDAC Policy Review**

The question of how the CALFED Program should approach water transfer issues was presented to BDAC for policy advice. BDAC concurred that water transfers are an appropriate and useful part of the CALFED water management strategy. BDAC members also expressed the view that the CALFED program should consider several water transfer issues, including third party impacts, protection of water rights, and the proper roles of water rights holders and water users in the review and approval process for transfers.

### **D. Structure and Content of the Water Transfer Element**

There are four parts to the CALFED transfer element.

First, where the administrative policies or actions of individual CALFED agencies affect water transfers, examination of these agency policies or actions may be appropriate, and CALFED may recommend and encourage that CALFED agencies adopt and implement uniform, integrated rules and criteria for the processing and approval of water transfers and for access to storage and conveyance facilities. These rules and criteria should be structured to assure that the benefit of water transfers includes not only an improvement in water supply reliability, but also a net improvement in ecosystem and water quality.

Second, the CALFED Program will address the need for adequate flexibility and capacity in Delta channels and conveyance facilities, so that transferred water can be moved across the Delta efficiently and effectively, without interfering or conflicting with the delivery of Project water supplies.

Third, CALFED may develop and submit to forums outside the CALFED process recommendations on water transfer policy or legislative needs. Such recommendations would relate to the further development of a rational and regulated water transfer market in California which operates within the parameters of the Governor's five criteria, or measures to support these criteria such as protections for water rights, instream flows, groundwater levels or third parties.

However, the initial premise of the water transfer element will be to rely on the existing legal structure as much as possible. CALFED will assume initially that new state or federal legislation is not necessary in order to "improve" the existing water transfer system. Most of the existing barriers to effective transfers are administrative, technical, political and socio-economic, not legal. If issues are identified which can only be resolved by legislation, those will be included in the CALFED legislative package or sent to a forum outside the CALFED process for negotiation.

Fourth, the transfer element will be structured to avoid impacts on local environments, groundwater resources, and third parties, whenever possible. The Program will provide assurances that any unavoidable impacts will be adequately mitigated.

## **E. Objectives of the Water Transfer Element**

In addition to CALFED goals listed above, there are objectives specific to the Water Transfer Element:

1. Promote, encourage and facilitate water transfers, within the framework of the Governor's water policy.
2. Address the institutional, regulatory and assurance issues which need to be resolved to provide for a more effective water transfer system.
3. Address the physical issues which need to be resolved to provide for a more effective water transfer system, and particularly cross-Delta transfers.
4. Encourage transfers that result in net improvements for water supply reliability.
5. Encourage transfers that result in net improvements for ecosystem health.
6. Encourage transfers that result in net improvement for water quality.
7. Encourage the development of a water transfer system that avoids adverse impacts where possible and that adequately mitigates unavoidable adverse impacts.
8. Promote and encourage uniform rules for transfers using state and federal project facilities and cross Delta conveyance capacity.
9. Promote and encourage the development of standardized rules for transfers based on replacement with groundwater and other conjunctive use type transfers, so that water transfers do not cause degradation of groundwater basins and long-term groundwater levels are sustained or improved.
10. Identify and resolve Delta carriage water and reservoir refill criteria issues.

## F. Issues to Resolve in Developing an Effective Water Market

A number of issues related to water transfers have been identified through the CALFED public process. Some of these issues are questions of legal interpretation; some are political or policy based; some are administrative or technical. Some issues exist because of misunderstanding or lack of understanding about how the current water transfer system operates.

The successful implementation of some of the components and elements of the CALFED Bay Delta program depends on the existence of a rational, well regulated statewide water market. The CALFED water transfer element can be used to identify and resolve issues which have impaired the development of a more efficient water transfer market or which will allow the other CALFED Program components to function more effectively.

Issues identified thus far in the process are listed below. Detailed issue papers discussing several of these issues are currently being prepared by CALFED agencies and consultants.

1. *Uncertainty about what constitutes transferable water* - There are a number of sub-issues under this topic, depending on the type of water being transferred and the method of transfer. Some of the subissues are:
  - a. for transfers of conserved water, what is the definition of consumptive use;
  - b. do water quality improvements, reductions in diversions, or changes in flow timing result in transferable water;
  - c. determination of "real water" vs. "paper water";
  - d. transfer of pre-1914 and riparian water;
  - e. transfer of water held under water rights settlement contracts, in particular the distinction between water held under water rights and water held under contract;
  - f. timing and availability of water for transfer;
  - g. changes in consumptive usage in anticipation of transfers.
2. *Regulatory process problems and permit streamlining* - Are there any changes or improvements to the water transfer permit process, either by transfer proponents or by the agencies that would result in more timely processing?
3. *Accounting and tracking of instream transfers* - How can water transferred under a Water Code section 1707 permit be tracked and accounted for?
4. *Priority of access to project facilities for transferred water* - Is there a way to give transfer proponents more reliability in access without compromising project obligations to contractors? This include issues related to reservoir carryover and spill priorities.
5. *Carriage water requirements in the Delta* - When are cross-Delta transfers subject to carriage water requirements? How are these determined and by whom? When does the export/inflow ratio apply to transfers?

6. *Reservoir refill criteria* - What are the rules for reservoir refill in connection with a transfer of stored water? Who determines these?
7. *Groundwater transfers* - There are a number of subissues related to groundwater transfers and groundwater substitution transfers including: when, and subject to what conditions, can groundwater be directly transferred and exported out of a basin? Can transferred surface water be replaced with groundwater?
8. *Protection of environmental values* - What rules and criteria would ensure that environmental impacts of proposed transfers will be critically evaluated, and avoided or mitigated?
9. *The nature, extent and ability to mitigate third party impacts* - How will CALFED address the need for mitigation of third party impacts of transfers? What is the role of local agencies?
10. *User vs District initiated transfers and local control* - Who has the authority to sell water when the District holds the right or the contract? When the user holds the right, what is the role of the local agency?
11. *Water rights and area of origin protection* - Do upstream water rights and "area of origin" priorities need additional protections to avoid impacts from water transfers? If so, what?
12. *Assumptions about transfers and capacity of new facilities* - Should any assumptions be made about water transfers in sizing new facilities? What assumptions should be made about water transfers when calculating water supply results of new facilities?
13. *Interpretation of the "no injury" rule and the distinctions among types of adverse impacts* - How is "injury" defined? Are there different types of injury (e.g., significant, avoidable, acceptable)?

## G. Essential Elements of an Effective Water Market

Many believe that a fundamental requirement of an efficient water transfer system is a functional and well-regulated water transfer market. Experience with the existing water transfer market and the history of specific transfer programs, such as the State Water Bank, indicate that there are essential elements of a water transfer market which would operate within the framework of the Governor's water policy and achieve the CALFED objectives.

1. The seller must have a quantifiable and transferable interest in a water supply. This interest must be clearly defined, legally and technically. All interested parties should be able to agree on the nature, quantity and transferability of this interest in water.

2. The transfer must occur between a willing seller and a willing buyer at a price and on terms mutually agreeable to both.
3. There must be sufficient, available and reasonably priced capacity (pumping, conveyance and storage) in the plumbing systems (Delta, aqueducts, and local systems) to accommodate the transfer, without dislocating higher priority movements of water (i.e., Project contract deliveries).
4. The parties should avoid adverse environmental impacts or mitigate to an acceptable level, including adverse impacts on local groundwater resources.
5. The parties should avoid local socio-economic impacts or mitigate to an acceptable level.
6. The parties should be able to accomplish the transfer in a timely manner through a regulatory process (permits and approvals) that is clearly defined and understood.
7. There should be a mechanism (such as a brokerage or clearinghouse) to bring buyers and sellers together.

## H. Tools

A number of tools are available to CALFED which may be of some utility in achieving the objectives and addressing the issues identified above:

1. *Comprehensive Water Transfer Rules* - A uniform and comprehensive set of rules for water transfers could be proposed based on the existing statutory framework to address many of the identified issues. These rules would include consistent and uniform definitions of what constitutes saved or conserved water and consumptive use; standards for evaluation of groundwater impacts; and agreements on carriage water and reservoir refill criteria.
2. *Water Rights Assurances* - Existing water rights law provides protection of the underlying contract or water right on which the transfer is based. Existing law also provides that water that is not used for five years is abandoned or forfeited. The law is also clear that conservation of water and transfers of water are reasonable and beneficial uses. Some agricultural water users are nonetheless concerned that water saved or transferred for other uses might be forfeited after a period of years, or that as a political matter, it will be difficult if not impossible to recover water from an urban area which has come to rely on the transferred water. This is a powerful disincentive to conserve or to achieve a higher level of efficiency and it acts as a disincentive to engage in long-term transfers. New legislation or specific contractual provisions may be able to address this issue, by providing the transferor with adequate assurances that water needed in the future would be recoverable. Such assurances would effectively reaffirm existing law,

the water rights priority system and the county of origin and watershed protection priorities.

3. *Third party impacts* - Agencies and stakeholders could enter into legally enforceable agreements or accept conditions to transfer agreements that provide for avoidance or mitigation of third party impacts on groundwater conditions, the local economy, and the local environment.
4. *Permit Processing* - Administrative rules or policies could be modified or adopted which would provide for further streamlining and/or "one stop shopping" for transfer approvals and permits.
5. *Conditions for transfers* - Water agencies wishing to buy or sell water through transfers would agree to conditions prior to approval of the transfer. Conditions could include being a signatory to the urban or agricultural conservation MOU, have an adopted and implemented water management plan, or other conservation based conditions. A priority system for approval of transfers may be given to agencies who have met these conditions.
6. *Water Transfer Tax or Fee* - A tax could be levied on all transfers to provide the source water county with a revenue stream to mitigate local socio-economic impacts. Money derived through this tax would be used to offset increases in social programs or other aspects that may be affected because of the transfer. Such a tax could also be structured to control the amount of water transferred out of any one region by creating a progressive tax (e.g., the tax rate would increase for each additional block of water transferred from the region). This would increase the cost of the water and require buyers and sellers to analyze the opportunities and impacts more closely.
7. *Environmental Water Tax* - A tax or surcharge consisting of a percentage of the transfer water itself could be imposed on cross Delta transfers. This water would become part of the resource pool of the ecosystem restoration program.
8. *State Drought Water Bank Conditions* - Conditions would be placed on agencies wanting to participate in the state's Drought Water Bank (Bank). For the example, the Bank rules might provide that no water will be made available to any buyer who has not completed water management planning according to the urban or agricultural MOU or other specified standards. (This is currently a policy of DWR.) Agencies that do not meet the requirements could be precluded from receiving Bank water or could be required to pay an additional premium for the water delivered (i.e., a surcharge).



## **I. Possible CALFED Approaches to Address These Issues**

The CALFED water transfer element may include recommendations or proposals to CALFED agencies and to other forums or processes outside CALFED on how a more efficient water transfer market can be developed, consistent with the CALFED solution principles and the Governor's water transfer policy. Some of the possible approaches are:

1. Recommendations for DWR, USBR and State Board on permit streamlining (timing and processing problems).
2. Agreement among agencies and stakeholders on definitions of conserved water and consumptive use.
3. Agreement among agencies and stakeholders on carriage water considerations for cross Delta transfers.
4. Agreement among agencies and stakeholders on reservoir refill criteria.
5. Interagency and stakeholder agreement on how access to project facilities can be provided for long-term transfers.
6. Proposals for addressing groundwater issues, e.g. - should pump and replace transfers be considered "efficient" uses of water if there is no "approved" conjunctive use program?
7. Proposals for addressing third party impacts, e.g. - should transfer price include payment to county or other local entity if this would mitigate identified socio-economic impacts?

## **J. Process**

At the May 22 BDAC Meeting, Chairman Madigan announced the appointment of a BDAC Work Group to consider the policy issues related to transfers and the appropriate role of CALFED in developing a water policy/water market framework. The Work Group will be co-chaired by Tib Belza and Roger Strelow.

Several of the issues identified in this paper will undoubtedly become the subject of discussion by the Work Group. The Work Group may identify other issues which will need to be considered.

Some of the issues identified here can probably be resolved at the agency or staff level, particularly those which are more technical in nature. The Transfers Agency Group (TAG) should identify which issues it should work on and which should be referred to the BDAC Work Group. Some of the issues will no doubt be discussed in both forums, and the agency committee can perhaps provide background and technical information to the Work Group on those issues.